AMENDMENTS TO THE CLAIMS

16. through 38. (Canceled).

39. (New) A method of satisfying a resource request in a computer system for configuring systems using a resource comprising a combination of resources, the method comprising:

instantiating in the computer system a configuration instance from a configuration model, wherein the configuration model includes a defined structural hierarchy of elements and a plurality of resources offered by elements in the structural model hierarchy;

(a) examining the configuration instance for an element offering a resource in response to a request for the resource, wherein the resource offered by at least one of the elements in the structural model hierarchy represents a combination of multiple like resources;

(b) selecting the element when the resource has not been previously consumed;

(c) selecting a newly created element instance that offers the resource if no existing elements satisfy the resource request; and

(d) repeating (a) through (d) when the element selection does not satisfy the resource request.

40. (New) The method of claim 39 wherein the combination of multiple like resources comprises pooled resources.

41. (New) The method of claim 40 wherein each element offering a resource that includes a pool of resources is a structural superior in the structural model hierarchy to an element consuming the resource.

42. (New) The method of claim 40 wherein a plurality of the resources in the pool of resources combine to satisfy the resource request.

43. (New) The method of claim 40 wherein one of the resources in the pool of resources satisfies the resource request.

44. (New) The method of claim 40 wherein the element offering the resource includes multiple power supplies whose combined power supply capacity is pooled to provide the requested resource.

45. (New) The method of claim 39 wherein the combination of multiple like resources comprises resources inherited from at least one other element.

46. (New) The method of claim 45 wherein each element offering a resource includes resources inherited from at least one other element is a structural superior in the structural model hierarchy to an element consuming the resource.

47. (New) The method of claim 45 wherein a plurality of the resources inherited from at least one other element combines to satisfy the resource request.

48. (New) The method of claim 45 wherein one of the resources inherited from at least one other element satisfies the resource request.

49. (New) The method of claim 39 wherein the configuration instance is empty when a new configuration is being defined and the configuration instance includes an existing configuration when an existing system is being updated.

50. (New) An apparatus for configuring systems comprising:

a processor;

a memory coupled to the processor;

a model stored in the memory, wherein elements included in the model are defined in a structural model hierarchy and each of the elements offers one or more resources;

a configuration engine, stored in the memory and executable by the processor, to satisfy a resource request using a resource comprising a combination of resources, wherein the configuration engine includes code executable by the processor for:

instantiating in the computer system a configuration instance;

(a) examining the configuration instance for an element offering a resource in response to a request for the resource, wherein the resource offered by at least one of the elements in the structural model hierarchy represents a combination of multiple like resources;

(b) selecting the element when the resource has not been previously consumed;

(c) selecting a newly created element instance that offers the resource if no existing elements satisfy the resource request; and

(d) repeating step (a) through (d) when the element selection does not satisfy the resource request.

51. (New) The method of claim 50 wherein the combination of multiple like resources comprises pooled resources.

52. (New) The method of claim 51 wherein each element offering a resource that includes a pool of resources is a structural superior in the structural model hierarchy to an element consuming the resource.

53. (New) The method of claim 51 wherein a plurality of the resources in the pool of resources combine to satisfy the resource request.

54. (New) The method of claim 51 wherein one of the resources in the pool of resources satisfies the resource request.

55. (New) The method of claim 51 wherein the element offering the resource includes multiple power supplies whose combined power supply capacity is pooled to provide the requested resource.

56. (New) The method of claim 51 wherein the combination of multiple like resources comprises resources inherited from at least one other element

57. (New) The method of claim 50 wherein each element offering a resource includes resources inherited from at least one other element is a structural superior in the structural model hierarchy to an element consuming the resource.

58. (New) The method of claim 57 wherein a plurality of the resources inherited from at least one other element combines to satisfy the resource request.

59. (New) The method of claim 57 wherein one of the resources inherited from at least one other element satisfies the resource request.

60. (New) The method of claim 50 wherein the configuration instance is empty when a new configuration is being defined and the configuration instance includes an existing configuration when an existing system is being updated.

61. (New) An article of manufacture comprising code encoded therein and executable by a processor to cause the processor to:

instantiate in the computer system a configuration instance from a configuration model, wherein the configuration model includes a defined structural hierarchy of elements and a plurality of resources offered by elements in the structural model hierarchy;

(a) examine the configuration instance for an element offering a resource in response to a request for the resource, wherein the resource offered by at least one of the elements in the structural model hierarchy represents a combination of multiple like resources;

(b) select the element when the resource has not been previously consumed;

(c) select a newly created element instance that offers the resource if no existing elements satisfy the resource request; and

(d) repeat (a) through (d) when the element selection does not satisfy the resource request.

62. (New) An apparatus for satisfying a resource request in a computer system for configuring systems using a resource comprising a combination of resources comprising:

a processor;

a memory coupled to the processor;

a model stored in the memory, wherein elements included in the model are defined in a structural model hierarchy and each of the elements offers one or more resources;

means for defining a structural model hierarchy and a plurality of resources offered by elements in the structural model hierarchy;

means for instantiating in the computer system a configuration instance;

(a) means for examining the configuration instance for an element offering a resource in response to a request for the resource, wherein the resource offered by at least one of the elements in the structural model hierarchy represents a combination of multiple like resources;

(b) means for selecting the element when the resource has not been previously consumed;

(c) means for selecting a newly created element instance that offers the resource if no existing elements satisfy the resource request; and

(d) means for causing (a) through (d) to search for another element to satisfy the resource request when the element selection does not satisfy the resource request.